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Fairness and other leadership heuristics: A four-nation study

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Leaders' fairness may be just one of several heuristics—cognitive shortcuts—that followers use to decide quickly whether they can rely on a given leader to lead them to ends that are good for the collective, rather than just good for the leader. Other leadership heuristics might include leader prototypicality and leader self-sacrifice. We hypothesized that if these other factors do function as leadership heuristics they would interact with fairness such that the correlation of fairness with leadership evaluations would be lower when either of the other factors was high. In two studies, both using the Lind-Sitkin Multiple Domain Leadership Instrument, we measured followers' impressions of their supervisors' interactional fairness, and prototypicality, and their leadership evaluations and ratings of team community; in Study 2 we also measured impressions of leaders' sacrifice. To test the generality of the phenomena, Study 1 included data from respondents in the US, India, and Germany; Study 2 included data from respondents in New Zealand and the US. The results supported the hypotheses.

Keywords: Leadership; Fairness; Sacrifice; Cross-national.

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A number of commentators (e.g., Bies, 2005; van Knippenberg, De Cremer, & van Knippenberg, 2007) have noted that the connection between leadership and perceived fairness has been the target of surprisingly little research and theory given the substantial literatures that exist on each of these topics and the conceptual overlap of those literatures. Both literatures, for example, devote a great deal of attention to voluntary accession to authority or influence and both have seen exchange, social identity, and relational theories advanced as explanations of when people will or will not accede to authorities or leaders (cf. for example, Adams, 1965; Conger, Kanungo, & Menon, 2000; House, 1971; Lind & Tyler, 1988; Thibaut & Walker, 1978; Tyler & Lind, 1992; van Knippenberg & Hogg, 2003). The conceptual proximity of the two topics has been sufficient to prompt some research activity, as van Knippenberg et al. (2007) note, and the results of these studies, which generally show that fairness does indeed have substantial impact on the evaluation and effectiveness of leaders, offers encouragement for pursuing questions about the psychology of fairness as it applies to leadership. It is clear, however, that there is a great deal more yet to be learned about when and how fairness affects the effectiveness and evaluation of leaders, as well as about how various leadership qualities affect the impact of fairness judgements.

One thing that may have inhibited our understanding of how fairness and leadership are related is the absence of any deep theoretical analysis of why a follower might care much whether his or her leader is fair. That is, we might take the general message of the research reviewed by van Knippenberg et al. (2007), that "leadership fairness matters", and pose the question "but why fairness?" Stated a bit differently, it is of course desirable that one's leaders be fair, but if fairness is as strong correlate of positive evaluations of leadership as current research suggests, one is left wondering why followers should care so much about fairness? It seems to us that our understanding of leadership might benefit from consideration of theories that have been advanced to explain fairness phenomena. In addition, if these theories work in the area of leadership, the results of leadership research on them might well have implications for our understanding of fundamental issues in the fairness literature.

Our goal here will be not to develop a model that attempts to explain all of the findings that exist on leadership and fairness (for such a model one can look elsewhere in this special issue; van Knippenberg et al., 2007), but rather to focus just on the basic relationship between fairness and acceptance of a leader. We offer a brief theoretical analysis of this relationship, inspired by an existing theory in the social fairness literature ("Fairness Heuristic Theory" see, e.g., Lind, 2001; van den Bos, Lind, & Wilke, 2001), and we explore what this analysis might tell us about why and how fairness affects perceptions of leaders. We then look in the leadership

literature for other factors that might have similar function in guiding followers' assessments of their situation *vis-à-vis* a leader. Next, we offer some predictions with respect to how these factors might interact with fairness in their impact on reactions to leaders. We then test our analysis using data from leadership surveys we have conducted in New Zealand, India, Germany, and the United States. Finally, we look at what these phenomena can tell us about the psychology of leadership and what they might also tell us something about the psychology of fairness.

THE FOLLOWER'S DILEMMA AND THE FAIRNESS HEURISTIC

Fairness Heuristic Theory is an explanation of the importance accorded to fairness in many social contexts. It begins with the idea that social relationships usually simultaneously offer rewards and identity greater than one could obtain on one's own *and* pose threats of exploitation and exclusion that would not exist if one were not in the relationship. The basic idea, then, is that there is almost always a tension between the potential "upside" and the potential "downside" of any relationship. The "upside" is represented by the possibility of better outcomes than one could obtain alone and by the satisfaction of belonging to something greater than oneself. The "downside" lies in the possibility of being taken advantage of and by the pain that would accompany rejection from a relationship or group in which one had invested one's identity.

This ubiquitous "fundamental social dilemma" notwithstanding, people manage to decide all the time whether they will or will not invest their effort and their social identity in a given group, team, or organization. The theory proposes that people must have a quick rule or mental shortcut that they use to decide whether they should come down on the relationship side or the go-it-alone side of this basic social dilemma. The theory argues that one standard that people frequently use to make these decisions is their perception of fair or unfair treatment. Specifically, if a person feels that others in the relationship have treated him or her fairly, then he or she will tend to commit to the relationship and will invest time, effort, and even personal identity in its success. If, on the other hand, the person feels that he or she has been treated unfairly, then he or she will tend to pull back from the relationship and will invest time and effort in the relationship only if tangible rewards are immediate or are guaranteed (and the person will not invest his or her identity at all).

Fairness Heuristic Theory argues that people choose fairness as a standard because they believe that fair treatment means that their contributions to the relationship are recognized and that they are accepted by others in the relationship or the group (see, e.g., Lind & Tyler, 1988,

chap. 10). A great deal of research in the fairness literature shows that the feeling that one has been treated fairly means generally that one feels not exploited or excluded, and this in turn offers some assurance that one will not in the future be exploited or rejected. Lind (2001) noted that there may well be other "heuristics" that people use to guide their level of engagement with the groups, teams, and organizations to which they belong, but these heuristics have not been explored in Fairness Heuristic Theory.

If one accepts that leadership and "followership" are each in fact roles in a leader–follower relationship, then we can ask what it is that makes potential followers more or less likely to enter this relationship with potential leaders. The logic behind Fairness Heuristic Theory applies readily, indeed we would argue perhaps especially, to the relationship between potential followers and potential leaders. Because leaders tend to have substantial influence over the allocation of outcomes and decisions about who will or will not be excluded from the group, the underlying concerns highlighted by the theory are particularly salient.

Consider what might be termed the "follower's dilemma", an important special case of the fundamental social dilemma mentioned earlier. The follower's dilemma involves the difficult decision between following a leader, with its attendant benefits and risks, versus the situation that would occur if the potential follower rejects the current leader and instead seeks to either act individually or to wait for another leader. Almost by definition, allowing another person to give one orders, guidance, or direction—i.e., to lead one—involves surrendering some of one's own independence of action. Of course, followers accept leadership in the hope that the leader will take the team or the organization to rewards and accomplishments that it could not attain without leadership, but there is always that chance that the leader will use his or her position for personal gain or to advance private agendas or pursue goals not shared by the followers. Absent years and years of experience with the same leader—and even then the dilemma remains, since people can change—how can a potential follower decide whether to follow or to resist the leader's guidance?

The *psychological* solution to the follower's dilemma, we believe, lies in finding some readily available mental shortcut, some heuristic, that a follower can look to as they try to decide whether a given person is someone they can follow without fear of exploitation or exclusion. One such heuristic, we would argue, is whether the leader seems to treat followers fairly. After all, as noted earlier, the whole body of research on the psychology of fairness shows that what people mean by "fair treatment" is that the person in question is *not* arbitrarily exploiting and excluding people. If a leader seems to be fair, the presumption is that he or she is unlikely to exploit or exclude followers in the service of private or hidden agendas, and this in turn

allows the followers to relax into following the leader with at least one fundamental concern put to rest.

The fairness heuristic as a solution to the follower's dilemma is not a *logical* solution—it is certainly possible for a leader, for example, to pretend to be fair in order to trick followers into acceding to a course of action that is really not in their best interest. Using fairness as a heuristic is, however, a *workable* solution, in that it allows groups, teams, and organizations to function effectively most of the time. The alternative to having some quick and easy way of deciding whom one should follow would be for potential followers to engage in endless rumination about whether or not the leader will engage in exploitative actions, and this would lead to collective inactivity that would probably in the long run be worse than the occasional error resulting from the inaccuracies in the heuristic. In addition, to the extent that fair behaviour is in fact evidence of prosocial values, the fairness heuristic may be tapping a real leadership phenomenon (van Dijk & De Cremer, 2006).

We should note that we are not suggesting that followers consciously go through this mental analysis of the value of a fairness heuristic, just that they respond to their fairness perceptions of the leader as though they did (see, e.g., De Cremer, van Dijke, & Bos, 2006). In reality, we suspect that part of most people's social learning involves acquiring both from personal experience and from popular wisdom the idea that one can rely upon leaders who show distributive fairness (allocating outcomes equitably), procedural fairness (respecting process and allowing others voice; see De Cremer et al., 2006), and interactional fairness (treating others with respect and dignity; see e.g., Judge & Piccolo, 2004). Alternatively, experience and conventional wisdom show that one needs to be wary of leaders who are unfair. Thus, when a new leader comes along, any nagging concern about whether he or she might be "taking us for a ride" (exploiting us) can be put to rest if the follower feels the leader has shown evidence of fairness, because the perceived fairness serves as a heuristic that solves the follower's dilemma and that allows the follower to simply decide whether to accept this leader. The followers can then get on with fulfilling their roles in the team or the organization.

OTHER LEADERSHIP HEURISTICS

In the original presentation of Fairness Heuristic Theory, Lind (2001) speculated that other heuristics might exist that could be used to address the dilemma posed by the benefits and dangers of social relationships, but he did not devote much attention to any heuristics other than fairness and he said nothing about how multiple heuristics might relate to each other in their effects. If other heuristics could be found, it would be important to

understanding fairness processes in general if we could examine how fairness judgements and these other heuristics interact. In the context of leadership and the ''follower's dilemma'', we believe that two variables from the literature on leadership might function as leadership heuristics.

Consider first actions by the leader that make it clear that he or she is sacrificing personal benefits or opportunities for the good of the team or the organization. A number of studies have made it clear that leader self-sacrifice has a substantial effect on leadership evaluations and related variables (see, e.g., De Cremer, 2006; De Cremer & Van Knippenberg, 2002, 2004, 2005). The literature on leader self-sacrifice shows that leaders who act in a self-sacrificing manner are more likely to be accepted and evaluated positively and are more effective in fostering cooperation within the group. These effects resemble closely those seen for perceptions that leaders are fair. It seems to us that, if the action is sufficiently dramatic, the perception that a leader is making sacrifices for the team can function as a heuristic that will resolve the follower's dilemma. If the leader is sacrificing his or her own interests for the good of the team, followers would probably conclude they can set aside their worries about being led to some goal that serves the leader's interest rather than their interests. In contrast, if the leader acts in self-benefiting ways, the follower's dilemma is likely to be resolved in favour of rejection of the leader or resistance to his or her direction.

A second factor that has received a good deal of attention in the psychological literature on leadership, especially in social identity analyses of leadership, is the leader's prototypicality (van Knippenberg & Hogg, 2003). Group members who are prototypical—who possesses attributes that are part of what makes the group special—are especially likely to be chosen as leaders and, once chosen, are evaluated more highly and are more effective (see, e.g., Hains, Hogg, & Duck, 1997; Haslam & Platow, 2001; Hogg, Hains, & Mason, 1998). If the leader is seen as being an especially good manifestation of the identity of the team or organization, especially representative of its values, goals, and strengths, then potential followers might conclude that the leader's goals will not differ much from theirs, and again they may tend to come down on the acceptance side of the follower's dilemma. On the other hand, if the leader seems to be very atypical of the team or organization, if he or she seems not to share their values or their identity, then the follower's dilemma will be either unresolved or resolved in favour of nonacceptance of the leader.

The idea that there might be multiple heuristics or standards that followers use to decide whether to accept a leader raises the question of how the various heuristics affect each other's impact. Some hint of how fairness, leader self-sacrifice, and prototypicality might interact in affecting acceptance of leaders can be found in Fairness Heuristic Theory's analysis of how

the fairness heuristic works across time and in its analysis of how various types of fairness information might interact with each other. The theory notes that there is little value to a shortcut standard if it is not available for quick reference when it is needed, so people will tend to seize on that information relevant to the heuristic that is most readily available. This information is then used, the dilemma is resolved, and the follower gets on with either accepting the leader's direction or not. Later information about that heuristic—or, presumably, about other heuristics—would have much less impact on the follower's evaluation of the leader, because the issue is, psychologically speaking, closed. Heuristic information, in other words, should show a strong primacy effect, having greater impact the earlier it is encountered. Lind, Kray, and Thompson (2001) demonstrated just such a primacy effect in the impact of different "units" of fairness information.

This line of reasoning suggests that various heuristics will probably interact in their impact on evaluations or acceptance of leaders so that if two heuristics are present, the joint impact of the two would be less than one would expect from the impact of each individually. This would happen because whichever heuristic is encountered first would absorb the lion's share of the potential impact, leaving less potential impact for the later heuristic. In cross-sectional data this would appear as an interaction effect, with less strong effects when both heuristics are high than one would expect from their individual effects.

There are a few tantalizing studies that suggest that such interactions do occur. De Cremer (2006) has shown that when a leader is autocratic, the impact of his or her subsequent self-sacrifice is diminished. If autocratic behaviour is seen as unfair, then this interaction is congruent with our prediction with respect to the moderating effect of one heuristic on the other. Similarly, research by De Cremer and van Knippenberg (2002) showed that experimental manipulations of procedural fairness and self-sacrifice each had greater impact when the other factor was absent.

PRESENT STUDIES

We report here two field studies of fairness and leadership, each conducted across multiple sites in different nations. The studies offered the possibility of testing the hypothesized interactions in natural settings. The studies examined follower evaluations of leaders in Western Europe, India, New Zealand, and the United States. Given that theorizing about fairness and leadership heuristics turns on fundamental issues in the social psychology of relationships and that previous work on Fairness Heuristic Theory showed support for the theory in both the US and in The Netherlands, we expected similar, rather than different, heuristic effects in the four nations. We chose

the four nations we used for our studies because other studies had suggested that these four countries show differences in other leadership dynamics (see, e.g., House, Hanges, Javidan, Dorfman, & Gupta, 2004; Javidan, Dorfman, deLuque, & House, 2006; Levy, Janson, Sitkin, & Lind, 2007) and because we had access to English-speaking participants in each site. If the predicted interactions appeared unqualified by national and cultural differences, it would suggest that the processes involved might well be as fundamental as we have suggested.

In each study supervisors solicited ratings of their leadership actions and qualities from direct reports as part of leadership development courses. The analyses we report later are based on the direct reports' ratings of their supervisors' interactional fairness, self-sacrifice, and prototypicality, as well as their evaluations of the supervisors' overall leadership and of the level of community—sense of community and team spirit—in the respondent's work group. In Study 1 we measured interactional fairness, leader prototypicality, leadership evaluations, and community; in Study 2 we measured interactional fairness, leader self-sacrifice, leader prototypicality, leadership evaluations, and community.

We expected the heuristic effects described previously to be seen primarily on the leadership evaluation ratings, since the fairness in question was the fairness of the leader. Examining the effects of the potential leadership heuristics on the community measure allowed us some discriminant validity with respect to the effects on leadership evaluations. We predicted that each of the leadership "heuristics" we have identified—fairness, leader self-sacrifice, and leader prototypicality—would show strong simple correlations with the leadership evaluations. We also predicted two-way interactions between the interactional fairness measures and the other two leader heuristics, self-sacrifice and prototypicality, such that fairness would be more strongly related to leadership evaluations when impressions of leader self-sacrifice or prototypicality were weak than when impressions of leader self-sacrifice or prototypicality were strong.

STUDY 1

Method

Survey instrument

The data were gathered from confidential online leadership surveys using the Lind-Sitkin Multiple Domain Leadership Instrument (MDLI); the surveys were conducted in conjunction with leadership training for (1) a large Indian-based provider of business and information technology services, (2) American executive MBA programmes ("EMBA") at the Fuqua School of

Business of Duke University, and (3) a English-language joint executive MBA programme for Western European (mainly German) executives run by Duke University in the United States and the Goethe Business School of Frankfort University in Germany. The survey allows leaders to select supervisors, peers, direct reports, and other raters to give feedback on their leadership actions and qualities; we used only the ratings by direct reports. The survey is administered in such a way that the leader cannot tell how he or she has been rated by any particular direct report, and both the leader and the direct report know this. In all three programmes the survey was administered before any leadership training was provided.[1]

Datasets

All 317 of the direct report respondents in the dataset from the Indian company identified themselves as Indian in a question asking about their nationality. They ranged in age from 21 to 42 years of age, averaging just over 29 years. Most (70%) of the respondents were male.

Most (82%) of the 47 direct report respondents in the Duke-Goethe EMBA dataset listed their nationality as German, the remainder were from a variety of European countries; their ages ranged from 22 to 64 years of age, averaging just under 37 years. The majority (65%) were male.

The great majority (81%) of the 160 direct report respondents in the Duke EMBA datasets listed their nationality as American, the remainder were mostly British, Canadian, or from various Latin American countries. Their ages ranged from 22 to 60 years, averaging just over 34 years; a majority (64%) were male.

Measures

Dataset contrasts. In order to test for differences among the three datasets, we computed two contrast scores for each respondent. The first dataset contrast gave the respondents a score of "1.0" if they were from the

[1]The Lind-Sitkin Multiple Domain Leadership Instrument consists a number of scales and subscales in addition to those described here (see Lind & Sitkin, 2007); all have been found to be reliable (Cronbach's alphas $> .72$, most $> .80$) across a number of respondent populations. The survey itself has shown good validity in predicting overall leadership ratings and in linking leadership in particular domains to follower loyalty, trust, community, aspirations, initiative, and stewardship. The fairness items we used here are based on measures often used to assess social process and interactional fairness (see Tyler & Lind, 1992); the leadership items, including the self-sacrifice and prototypicality items, are based on manipulations or measures commonly used in experimental studies of these constructs (see van Knippenberg et al., 2007), the community items are taken from measures we have used in the past to measure involvement with social groups and organizations (e.g., Lind et al., 2001). The instrument is available free of charge for research purposes from Allan Lind.

Duke EMBA dataset and a score of "−0.5" if they were from either of the other two datasets. The second dataset contrasts gave the respondents a score of "0" if they were from the Duke EMBA dataset, a score of "+1.0" if they were from the Duke-Goethe EMBA dataset, and a score of "−1.0" if they were from the Indian corporate dataset. Since these two contrasts are orthogonal, they capture all of the variation among the datasets. In the analyses reported later, we entered the relevant main effects and interactions of the dataset contrasts and the predictor variables in each equation; because there were so many potential interaction terms, we report them only if the R^2-change statistic for a given level of dataset interaction was significant.

Leadership evaluations. Near the end of the online survey, the respondent was asked to rate his or her supervisor's overall leadership by indicating the extent to which he or she agreed with each of the following questions: "I think Jane Doe is an exceptional leader", "Jane's leadership has a very positive effect on the team", and "We look to Jane for leadership" (the supervisor's name was substituted for "Jane" or "Jane Doe" as appropriate). All responses to this and the following measures used seven buttons, which were displayed under six equally spaced labels reading "Strongly agree", "Agree", "Neutral", "Disagree", and "Strongly disagree" (the respondents were also given a "don't know" option). The responses were averaged to form a single leadership evaluation index. Table 1 shows the reliability of the measure and its correlation with the other measures.

Community. The community measure was the average rating of agreement with the statements, "Our team shares a strong sense of community", "Each of us is concerned with the success of the team as a whole", and "I am proud of the team's work and accomplishments". Ratings were made as on the leadership evaluation measures.

TABLE 1
Study 1 correlations and reliabilities

Measures	*1*	*2*	*3*	*4*	*5*	*6*
1. Dataset contrast 1	–					
2. Dataset contrast 2	.522	–				
3. Interactional fairness	.182	.104	*.851*			
4. Leader prototypicality	.137	.033	.670	*.766*		
5. Evaluation of leader	.280	.098	.720	.722	*.934*	
6. Rating of community	.125	−.095	.449	.526	.498	*.859*

Values are Pearson correlations and Cronbach's alphas.

Leader interactional fairness. The leader's interactional fairness was measured by averaging respondents' agreement with the following statements, referring to the supervisor: "Shows respect for people regardless of their level or status", "Deals fairly with me", "Is careful to explain her decisions" (pronoun adjusted depending on the gender of the supervisor), and "Treats everyone with fairness". Again the respondents indicated their agreement on a 7-point scale with the five equally spaced labels above the buttons.

Leader prototypicality. The respondents' perceptions of the leader's prototypicality was measured by averaging their ratings on the following statements about the supervisor: "Is a great fit for the team", "Exemplifies what is best about the team", and "Makes her personal life a good example for the team".

Results

Fairness main effects and dataset differences. A regression predicting the direct reports' leader evaluations of their supervisors from the dataset contrasts, the interactional fairness ratings, and the interactions of these variables showed significant effects for the first dataset contrast, $\beta = .092$, $t(554) = 2.659$, $p < .008$, and for interactional fairness, $\beta = .646$, $t(554) = 16.254$, $p < .001$, $R^2 = .529$. The coefficient for interactional fairness shows a substantial correlation across all the datasets between interactional fairness and leadership evaluations. The significant dataset contrast is due to lower fairness ratings and leadership evaluations in the Indian (mean interactional fairness rating = 6.08; mean leadership evaluation rating = 5.92) and German (mean fairness rating = 6.11; mean leadership evaluation = 5.88) datasets relative to the US dataset (mean fairness rating = 6.40; mean leadership evaluation = 6.35). A similar analysis of the sense of community ratings showed significance for both dataset contrast main effects: first dataset contrast coefficient, $\beta = .159$, $t(554) = 3.572$, $p < .001$; second dataset contrast coefficient, $\beta = -.228$, $t(554) = -5.237$, $p < .001$; and for the fairness ratings, $\beta = .424$, $t(544) = 8.411$, $p < .001$, $R^2 = .242$. The dataset contrasts are due to lower community ratings in Germany (mean = 5.35) than in India (mean = 6.00) and lower community ratings in these two datasets than in the US dataset (mean = 6.17).

Leader prototypicality. We next predicted leader evaluations and community ratings from ratings of leader prototypicality and interactional fairness, as well as the interaction of the two. For the equation predicting

leader evaluations, we found significant coefficients for fairness, $\beta = .321$, $t(546) = 7.091$, $p < .001$, prototypicality, $\beta = .467$, $t(546) = 9.779$, $p < .001$, and for their interaction, $\beta = -.112$, $t(546) = -3.458$, $p < .001$, $R^2 = .643$. The interaction was due to higher correlations between leader interactional fairness ratings and leadership evaluations when leader prototypicality ratings were below the mean ($r = .658$) than when the prototypicality ratings were above the mean ($r = .370$).

For the prediction of ratings of community, significant regression coefficients were found for the interactional fairness ratings, $\beta = .192$, $t(546) = 3.104$, $p < .002$, and for the prototypicality ratings, $\beta = .387$, $t(546) = 5.915$, $p < .001$, $R^2 = .331$, but the interaction was not significant.

Discussion

The findings of Study 1 are in line with the predictions we advanced earlier. The respondents' perceptions of their supervisors' interactional fairness and their perceptions of his or her prototypicality were good predictors of leadership evaluations. In addition, as we predicted, these two variables interacted such that when leaders were seen as prototypical, the correlation between interactional fairness and leadership evaluations was weaker. The study is noteworthy in that it not only confirms the relationship between interactional fairness and leadership, and confirms the interaction effect, but it does so across three quite distinct business cultures in very different parts of the world.

We will reserve comment on those aspects of the research that are shared by both of our studies for the General Discussion. For the moment, the principal shortcoming of Study 1 is that it did not contain a measure of leader self-sacrifice, the other major leadership heuristic we considered earlier. In Study 2, we included measures of all three of the leadership heuristics we have considered, and we extended the global reach of our examination of these matters to a fourth nation.

STUDY 2

Method

Survey instrument

The data were collected with a version of the Lind-Sitkin MDLI that was longer than the one used in Study 1. Again the survey was used in conjunction with leadership training programmes: The data reported here were collected from (1) the direct reports of supervisors participating in programmes for community and emerging leaders in New Zealand,

(2) executive MBA classes in leadership at Duke University in the United States, and (3) a programme on leadership for executives and managers in nonprofit organizations in the United States. In New Zealand, the survey was administered after the supervisors had been in the leadership programmes for some time; in the two American programmes, the surveys were administered before the supervisors began their programmes. The same general process and the same anonymity procedures were used as in Study 1.

Datasets

All 81 of the respondents in the New Zealand dataset indicated that they were of New Zealand nationality; 54% were female. The New Zealand respondents ranged in age from 17 to 70 years, averaging just over 31 years. The great majority of the 150 respondents (91%) in the Duke EMBA dataset were American, the remainder were mostly British (3.5%) and Canadian (2.5%); 54% of the respondents in this dataset were male. Respondents in the Study 2 Duke EMBA dataset ranged from 19 to 56 years of age, averaging just over 35 years. Almost all (98%) of the 35 respondents in the US nonprofit dataset were American, one respondent was from Bolivia; 71% of the respondents in this dataset were female. They ranged from 19 to 65 years of age, averaging just under 38 years.

Measures

Dataset contrasts. The first dataset contrast gave scores of "1.0" to all of the respondents in the New Zealand dataset and scores of "−0.5" to all of the respondents in the American datasets. The second dataset contrast gave scores of "0" to the respondents in the New Zealand dataset, scores of "1.0" to respondents in the Study 2 Duke EMBA dataset, and scores of "−1.0" to respondents in the American nonprofit dataset. As in Study 1, these contrasts were orthogonal, so they captured all of the variability among the datasets. The analyses of these contrasts in Study 2 were similar to those in Study 1.

Leadership evaluations. The respondents indicated their agreement or disagreement with three statements about their supervisor: "I think Jane is an exceptional leader", "Jane's leadership has a very positive effect on our team", and "We seldom look to Jane for leadership" (last item reverse-scored; supervisor's name substituted for "Jane" in actual survey). On this and the other rating scales the respondents clicked on one of five buttons labelled "Strongly agree", "Agree", "Neutral", "Disagree", and "Strongly disagree"; there was also a "Don't know" option. The responses were

averaged to form a leadership evaluation index. Table 2 shows the reliability of the measure and its correlations with the other measures.

Community. The respondents rated their agreement or disagreement with following statements: ''Our team enjoys working together'', ''On Jane's team, each of us is concerned with the success of the team as a whole'', ''Our team is proud of our work and our accomplishments''. The ratings are averaged to form an index of community spirit.

Leader interactional fairness. The leader's interactional fairness was measured using the respondents' agreement with the following statements as qualities of the supervisor and his or her actions: ''Shows respect for people regardless of their level or status'', ''Always deals fairly with team members'', ''Sometimes leaves me feeling I have been treated unfairly'' (reverse-scored), and ''Is careful to explain her views and decisions''. The scores were averaged to form the interactional fairness measure.

Leader self-sacrifice. The leader's self-sacrifice was measured by averaging scores showing the respondent's agreement with the following statements about the supervisor: ''Is always willing to make sacrifices for the good of the team'', ''Sometimes put her personal gain ahead of the team's best interests'' (reverse-scored), and ''Is willing to accept personal challenges if they serve the long-term interests of the team''.

Leader prototypicality. The leader's prototypicality was measured by averaging the ratings showing agreement with the following statements about the supervisor: ''In terms of interests and values, she does not have a lot in common with the team'' (reverse-scored; in this and other items the gender of the pronoun was adjusted to fit the gender of the supervisor), ''Exemplifies what is best about the team'', and ''Is a great fit for the team''.

TABLE 2
Study 2 correlations and reliabilities

Measures	*1*	*2*	*3*	*4*	*5*	*6*	*7*
1. Dataset contrast 1	–						
2. Dataset contrast 2	−.401	–					
3. Interactional fairness	−.116	−.051	*.794*				
4. Leader's self-sacrifice	−.144	−.034	.669	*.728*			
5. Leader prototypicality	−.054	.043	.635	.588	*.805*		
6. Evaluation of leader	−.088	−.004	.676	.625	.762	*.869*	
7. Rating of community	−.079	.030	.473	.390	.428	.446	*.806*

Values are Pearson correlations and Cronbach's alphas.

Results

Fairness main effects and dataset differences. We first tested whether the direct reports' ratings of their supervisors' interactional fairness differed across the three datasets and whether the fairness ratings showed strong main effect correlations with their ratings of the supervisors' leadership and of the level of community in their teams. Hierarchical regressions entering first the two dataset contrasts then the fairness measure showed that there were no significant differences among the three datasets and no interactions of the dataset contrasts with the fairness to leadership evaluation regression. Interactional fairness, $\beta = .645$, $t(245) = 11.059$, $p < .001$, $R^2 = .489$, was a strong and significant predictor of the direct reports' evaluations of their supervisors. The corresponding analyses using ratings of community produced similar results: no significant dataset main effects or interactions and strong prediction from interactional fairness, $\beta = .486$, $t(245) = 6.800$, $p < .001$, $R^2 = .483$, to the community index. Thus, interactional fairness was consistently and strongly related to positive leadership evaluations and positive community spirit across all three of the Study 2 datasets.

Leader self-sacrifice. Hierarchical regressions testing the relationship between the direct reports' ratings of their supervisors' sacrifices for the good of the team or the organization and their leadership evaluation ratings showed no main effects or interactions with the dataset contrasts. As was the case with the fairness ratings, the sacrifice ratings showed strong regression coefficients both in when predicting leadership evaluations, $\beta = .561$, $t(234) = 8.907$, $p < .001$, $R^2 = .394$, and when predicting community spirit, $\beta = .396$, $t(242) = 5.343$, $p < .001$, $R^2 = .399$.

When both interactional fairness and leader sacrifice were entered simultaneously into a regression predicting leadership evaluations, along with their interaction, significant regression coefficients were seen for interactional fairness, $\beta = .472$, $t(238) = 5.901$, $p < .001$, leader sacrifice, $\beta = .237$, $t(238) = 3.031$, $p < .003$, and for the interaction term, $\beta = -.145$, $t(238) = -3.106$, $p < .002$, $R^2 = .531$. When interactional fairness and sacrifice and their interaction were used to predict ratings of community, interactional fairness, $\beta = .397$, $t(238) = 3.936$, $p < .001$, and the interaction term, $\beta = .140$, $t(238) = 2.380$, $p < .018$, $R^2 = .279$, were significant.

As predicted, the significant interaction on leadership evaluations was due to diminished effects of each variable under high levels of the other, though the differences are quite modest. Thus, when the leader was rated above the mean on sacrifice, the correlation between leader fairness and leadership evaluations was .525, while when the leader was rated below the mean, the corresponding correlation was .556. The interaction on ratings of

community ran in the opposite direction: The correlation between the leader's fairness and ratings of community was slightly lower when the leader's interactional fairness ratings were below the mean ($r = .358$) than when the leader's fairness ratings were above the mean ($r = .378$). It appears that sacrifice and interactional fairness together enhanced the impact of either alone.

Leader prototypicality. The analyses comparing the three datasets and examining whether the relationship between leader prototypicality and leadership evaluations varied across the datasets showed a strong regression coefficient for leader prototypicality, $\beta = .709$, $t(243) = 15.241$, $p < .001$, and for the interaction of the second dataset contrast with leader prototypicality, $\beta = .113$, $t(243) = 2.437$, $p < .016$, $R^2 = .596$. The correlation between leader prototypicality and leadership evaluations was higher in the US nonprofit dataset ($r = .813$) than in the US executive MBA dataset ($r = .797$). The regressions predicting community showed a significant coefficient for leader prototypicality, $\beta = .429$, $t(243) = 6.599$, $p < .001$, $R^2 = .196$, and no dataset effects.

Next the direct reports' evaluations of their supervisors' leadership was predicted from their ratings of the leader's interactional fairness, prototypicality, and the interaction of these two variables. Significant coefficients were seen for interactional fairness, $\beta = .256$, $t(239) = 4.396$, $p < .001$, prototypicality, $\beta = .532$, $t(239) = 10.118$, $p < .001$, and the interaction of the two, $\beta = -.129$, $t(239) = 3.247$, $p < .001$, $R^2 = .655$. When the leader's prototypicality ratings were below the mean, the correlation between fairness and leadership evaluations was higher ($r = .570$) than when the leader's prototypicality ratings were above the mean ($r = .428$).

Predicting ratings of community from the leaders' interactional fairness and their prototypicality produced significant coefficients for interactional fairness, $\beta = .368$, $t(239) = 4.261$, $p < .001$, prototypicality, $\beta = .223$, $t(239) = 2.861$, $p < .005$, and the interaction, $\beta = .163$, $t(239) = 2.772$, $p < .006$, $R^2 = .285$. When the leader's prototypicality ratings were below the mean, the correlation between leader fairness and community was lower ($r = .268$) than when his or her prototypicality ratings were above the mean ($r = .415$).

Finally, it is worth noting that when only sacrifice and prototypicality were entered as predictors of leadership evaluations, both were significant predictors, $\beta = .259$, $t(239) = 5.116$, and $\beta = .578$, $t(239) = 11.283$, for sacrifice and prototypicality, respectively, and their interaction was significant, $\beta = -.105$, $t(239) = 2.579$, $R^2 = .629$. The pattern of this interaction was similar to that seen on the interactions of fairness with each of these variables: Higher ratings on each variable lead to lower correlations between the other and leadership evaluations.

GENERAL DISCUSSION

In general, the results of the two studies support our predictions: All three of the major variables showed strong relationships to leadership evaluations, and both leadership self-sacrifice and leadership prototypicality interacted with the leader's interactional fairness in the fashion predicted. That is, both factors when high reduced the apparent impact of the leader's fairness. As we noted earlier, we are not the first to observe many of these effects, but the current studies are noteworthy in two respects. First, they show that the simple effects of these three variables appear with remarkable similarity across six different datasets from four different nations and in both for-profit and nonprofit organizational contexts. Second, especially in Study 2, the appearance of the quite similar patterns of interactive effects of both self-sacrifice and prototypicality with fairness is certainly congruent with the idea that both of these factors are affecting the impact of fairness in the same basic way.

We will consider next some of the limitations of these studies, but if we are correct about the way that people use mental shortcuts to reassure themselves about their leaders—if people do indeed use these perceptions of leaders to resolve the "follower's dilemma" quickly so that they can either get on with the work of the team or move to protect themselves from leaders whom they believe they have reason to fear—then some interesting implications flow from our analysis. Perhaps the most important of these is the possibility that the heuristics will be formed and used quickly and then the follower will relax his or her vigilance about these issues. This follows from the logic of heuristic processing as described in Fairness Heuristic Theory. If fairness, self-sacrifice, and prototypicality work in this way, new leaders may find it very useful to engage their followers early on by enacting some noticeable act of fairness or sacrifice or by making their prototypicality especially salient. Once this has been done, the heuristic analysis suggests, the leader will have some "breathing space" where followers will give him or her credence and believe that the leader will lead them to some worthy goal. We assume that the presumption of leadership that is awarded by evidence of fairness, sacrifice, or prototypicality is rebuttable—too many bad outcomes for the team or some obvious evidence of the leader engaging in acts of self-benefit will, we think, make followers wake up and reevaluate the leader, but the heuristic analysis suggests that these process may give the leader some "slack", some buffer from strict accountability for outcomes. Savvy leaders can use this buffer to move the team in the direction that he or she wants it to take.

Does this mean that once this early proving period is over there is no reason for additional fairness, sacrifice, or evidence of prototypicality? Certainly not, we would say, and there is evidence for this in the findings on

the community measure. Leaders have other concerns than just enhancing their own evaluations in the eyes of their followers; they must also attend to the welfare of their team. Part of this task, we would suggest, lies in modelling such things as fairness, sacrifice, and exemplifying the values and identity of the team. Our findings show at the very least that these leadership actions each added to enhanced feelings of community and at best that fairness interacted with sacrifice and prototypicality in a positive fashion to boost feelings of community even more that each did alone.

Returning to the interactions we observed on the leadership evaluations, though, there are interesting practical, as well as theoretical, implications. It appears that people are less sensitive to unfairness when they see their leader as prototypical or self-sacrificing and that they are more sensitive to fairness when those leadership qualities are lacking. This suggests that, for example, prototypical leaders may be able to "get away with" more injustice than can less prototypical leaders, or that leaders who find themselves advantaged by their own policies would do well to devote special attention to such things as interactional fairness. Indeed, the overall implication of the interactions we saw in Study 2 is that a leader would be well advised, especially perhaps in his or her early days in a leadership position, to find some way to give a strong impression of one of these three characteristics: fairness, sacrifice, or prototypicality.

Our findings also have some very important implications for our understanding of the psychology of fairness. If sacrifice and prototypicality serve as heuristics in relationships other than that of leader and follower, it would suggest that people are less sensitive to perceived injustice at the hands of those who have made sacrifices for the relationship or those who they deem to be more like them (or more admirable in terms of shared identity or values). Might people tolerate less fair treatment at the hands of a spouse who has given up a great deal for the marriage or a colleague who is admirable in terms of how much he or she exemplifies ideal values or abilities? There is clearly much work to be done before we can see how these findings play out in the area of social fairness research, but the findings reported here, and those that show similar effects, suggest some new and exciting directions for fairness research. If fairness is only one of several heuristics for social interaction and engagement, then there may be moderating effects on fairness phenomena that we have not hitherto explored.

There are, of course, some limitations of the current research that must be taken into account as we consider these findings and their implications. Both studies used cross-sectional survey data from a single instrument, and the simple correlations between fairness, leader sacrifice and leader prototypicality on the one hand and leader evaluations and community on the other might be due to that. That said, all of the simple effects have been observed

in experimental studies, as has at least one of the interactions, so it seems doubtful that the methods we used account for all of the relationships.

The particular pattern of interaction we observed on the leadership evaluations—lessened correlations between fairness and leadership evaluations when sacrifice or prototypicality were high than when these variables were low—might arguably have been due to some of the statistical characteristics of the data. Specifically, in both studies the leadership evaluations showed substantial negative skew, with many of the ratings piling up near the top of the scale. This sort of "positivity effect" is not uncommon in surveys of this sort, but in the current context it might have been the case that the skewness left little room for the fairness effect to play itself out under high levels of the other variables. In other words, a normally robust fairness effect might have "squashed" against the ceiling of the scale when the evaluations were lifted by one of the other variables.

The problem with this argument is that is should apply as well to the community ratings, where the skewness is as great and where the mean ratings are generally as high as are those of the leadership evaluations. As is clear from the results reported here, there was plenty of room for the opposite interaction to appear on the community ratings. This distribution problem, like the method issues discussed earlier, might give good reason for replicating the findings we report here in experimental contexts, but they hardly invalidate the general encouragement that these findings offer for our heuristic analysis.

We think that the next logical step in the exploration of follower heuristics will be to explore with experimental studies like that conducted by Lind et al. (2001), whether leadership evaluations show the primacy effect that lies at the core of our predictions. An experimental study that examined the timing of information on leader self-sacrifice, prototypicality, and fairness would test definitively the process that we believe underlies the interactions we observed in our field studies. Another productive line of research would be to look for possible "substitution" effects of the sort predicted by Fairness Heuristic Theory for different modalities of fairness. The theory predicts that, not only will people seize on whatever heuristic is most readily available to them to resolve the dilemma of personal investment, they will use their judgement about that heuristic to construct beliefs about other heuristics. Thus, if procedural fairness information is available before distributive fairness information, the procedural fairness information will be used as the heuristic and it will also influence beliefs about the fairness of outcomes; on the other hand, if distributive fairness information is available first, then the distributive information will be used as the heuristic and it will influence beliefs about procedural fairness. Van den Bos et al. (2001; see also Van den Bos, Lind, Vermunt, & Wilke, 1997; Van den Bos, Wilke, Lind, & Vermunt, 1998) describe a

research programme that shows exactly this pattern of effects. In the leadership context, this would argue that early information on fairness, sacrifice, or prototypicality respectively would not only serve as a heuristic for leadership evaluations, such information would also alter subsequent beliefs about whichever of the other potential heuristics were not encountered in early experiences with the leader. Thus, if one's first encounters with a leader made one believe that he or she was prototypical of the team, one might be more disposed to interpret later actions by the leader as fair or self-sacrificing. (This substitution effect possibility might explain, incidentally, why some of the interaction effects were relatively weak and why the correlations among fairness, self-sacrifice, and prototypicality are so strong.)

It would be interesting to look for similar substitution effects in traditional fairness paradigms in response to early information on leader self-sacrifice and prototypicality. One might predict that relationship partners who show themselves to be prototypical, for example, are seen, absent other information, as more fair than nonprototypical leaders, or that relationship partners who behave fairly are seen as more likely to make sacrifices for the good of the relationship than are less fair partners.

Thus, while we cannot claim that our findings *prove* the leadership heuristic analysis, we do think that they offer sufficient encouragement to suggest that additional research is reasonable, and they do suggest some intriguing implications. The psychological dynamics of leadership impressions, especially as they are wound up with cognitions about fairness, sacrifice, and prototypicality, seem to us to be ripe targets for expanding our understanding of how leadership really works, and the psychological dynamics of fairness may well be linked to nonfairness social heuristics in ways we are only beginning to imagine.

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